AMENDMENTS

Please amend the claims as follows:

1. (original) A composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to said reagent ligands.

2. (original) The composition of claim 1, wherein each of said reagent ligands is bound to a reagent antibody.

3. (original) The composition of claim 1, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

4. (original) The composition of claim 1, wherein said reagent ligands are on an array.

5. (original) The composition of claim 1, wherein said reagent antibodies are labeled.

6. (original) The composition of claim 5, wherein said label is a fluorescent label.

7. (original) A composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to a subset of said reagent ligands, wherein an unbound reagent ligand has binding activity for a reagent antibody having specificity for a molecule in a sample.

8. (original) The composition of claim 7, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

9. (original) The composition of claim 7, wherein said reagent ligands are on an array.

10. (original) The composition of claim 7, wherein said reagent antibodies are labeled.

11. (original) The composition of claim 10, wherein said label is a fluorescent label.

12. (currently amended) A method of determining an epitope in a sample, comprising:

(a) contacting ~~[[a]]~~ the composition of claim 7 ~~comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to said reagent ligands~~ with a sample; and

(b) detecting said reagent antibodies bound to said diverse population of reagent ligands.

13. (original) The method of claim 12, further comprising the step of identifying which of said reagent ligands is unbound by reagent antibody.

14. (original) The method of claim 12, wherein said reagent ligand unbound by reagent antibody has binding activity for an antibody having specificity for a molecule in said sample.

15. (original) The method of claim 12, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

16. (original) The method of claim 12, wherein said sample is selected from the group consisting of a cell, a tissue, a body fluid, and an organism.

17. (original) The method of claim 12, wherein said tissue is a biopsy from an individual with a disease.

18. (original) The method of claim 12, wherein said sample is a species of animal or plant.

19. (original) The method of claim 12, wherein said reagent ligands are on an array.

20. (original) The method of claim 12, wherein said reagent antibodies are labeled.

21. (original) The method of claim 20, wherein said label is a fluorescent label.

22. (original) A method of diagnosing a disease, comprising:

(a) contacting a composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to said reagent ligands with a sample from an individual;

(b) detecting said reagent antibodies bound to said diverse population of reagent ligands; and

(c) identifying which of said reagent ligands is unbound by reagent antibody, wherein a reagent ligand unbound by reagent antibody has binding activity for an antibody having specificity for a molecule associated with said disease.

23. (original) The method of claim 22, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

24. (original) The method of claim 22, wherein said reagent ligands are on an array.

25. (original) The method of claim 22, wherein said reagent antibodies are labeled.

26. (original) The method of claim 25, wherein said label is a fluorescent label.

27. (original) A method of identifying a potential therapeutic target, comprising:

(a) contacting a composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to said reagent ligands with a sample from an individual having a disease;

(b) detecting reagent antibody binding to said diverse population of reagent ligands;

(c) comparing said reagent antibody binding to said diverse population of reagent ligands to the antibody binding of a normal sample contacted with said composition; and

(d) determining which of said reagent ligands differs in antibody binding between said sample from said individual having a disease and said normal sample, wherein a reagent ligand differing in antibody binding between said samples is a potential therapeutic target.

28. (original) The method of claim 27, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

29. (original) The method of claim 27, wherein said reagent ligands are on an array.

30. (original) The method of claim 27, wherein said reagent antibodies are labeled.

31. (original) The method of claim 30, wherein said label is a fluorescent label.

32. (original) The method of claim 27, wherein the reagent antibody displaced from said reagent ligands differing in antibody binding is a potential therapeutic antibody.

33. (original) A method of mapping accessible epitopes of a polypeptide, comprising:

(a) contacting a composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent antibodies specifically bound to each of said reagent ligands with a polypeptide;

(b) detecting said reagent antibodies bound to said diverse population of reagent ligands; and

(c) identifying which of said reagent ligands is unbound by reagent antibody, wherein a reagent ligand unbound by reagent antibody has binding activity for an antibody having specificity for a polypeptide epitope accessible to said antibody.

34. (original) The method of claim 33, wherein said reagent ligands are peptides.

35. (original) The method of claim 33, wherein said reagent ligands are on an array.

36. (original) The method of claim 33, wherein said reagent antibodies are labeled.

37. (original) The method of claim 36, wherein said label is a fluorescent label.

38. (original) A method of determining a binding activity in a sample, comprising:

(a) contacting a composition comprising a diverse population of reagent ligands attached to a solid support and a diverse population of reagent binding molecules specifically bound to said reagent ligands with a sample; and

(b) detecting said reagent binding molecules bound to said diverse population of reagent ligands.

39. (original) The method of claim 38, further comprising the step of identifying which of said reagent ligands is unbound by reagent binding molecule.

40. (original) The method of claim 38, wherein said reagent ligand unbound by reagent molecule has binding activity for a binding molecule having specificity for a molecule in said sample.

41. (original) The method of claim 38, wherein said reagent ligands are selected from the group consisting of peptides, oligosaccharides, oligonucleotides, and organic molecules.

42. (original) The method of claim 38, wherein said sample is selected from the group consisting of a cell, a tissue, a body fluid, and an organism.

43. (original) The method of claim 38, wherein said tissue is a biopsy from an individual with a disease.

44. (original) The method of claim 38, wherein said sample is a species of animal or plant.

45. (original) The method of claim 38, wherein said reagent ligands are on an array.

46. (original) The method of claim 38, wherein said reagent binding molecules are labeled.

47. (original) The method of claim 38, wherein said label is a fluorescent label.